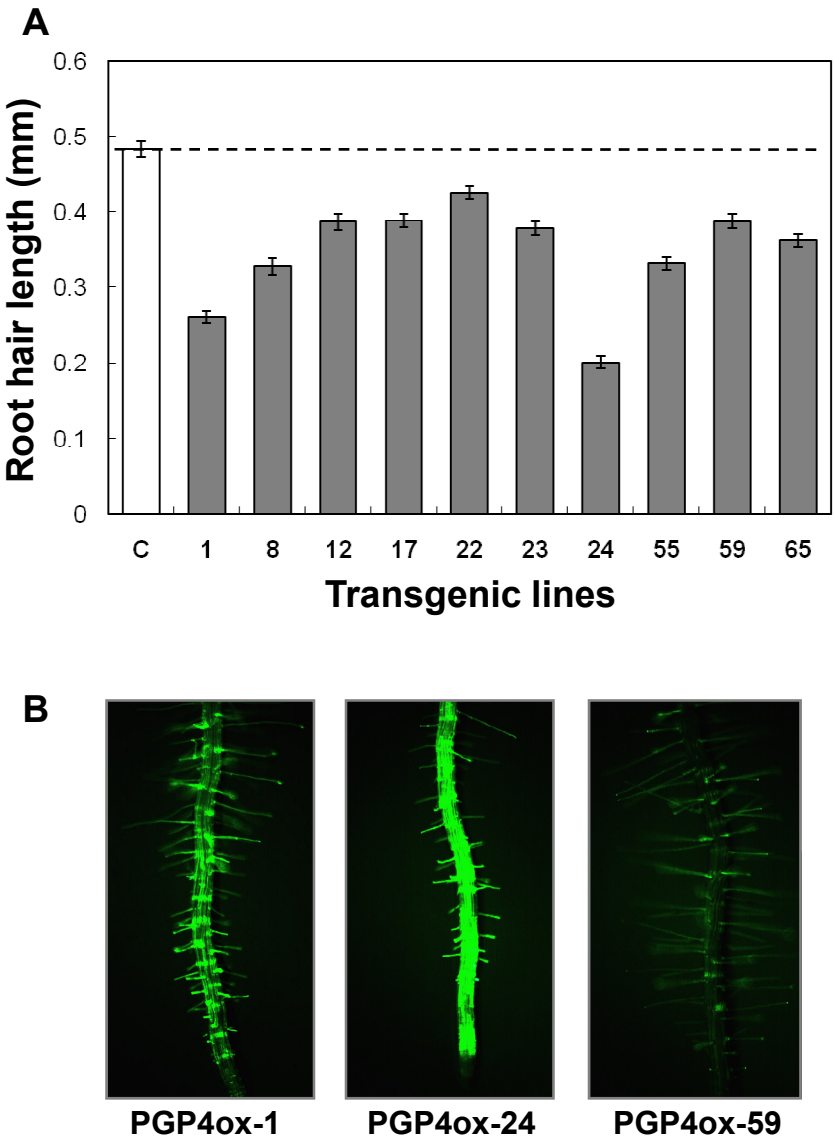
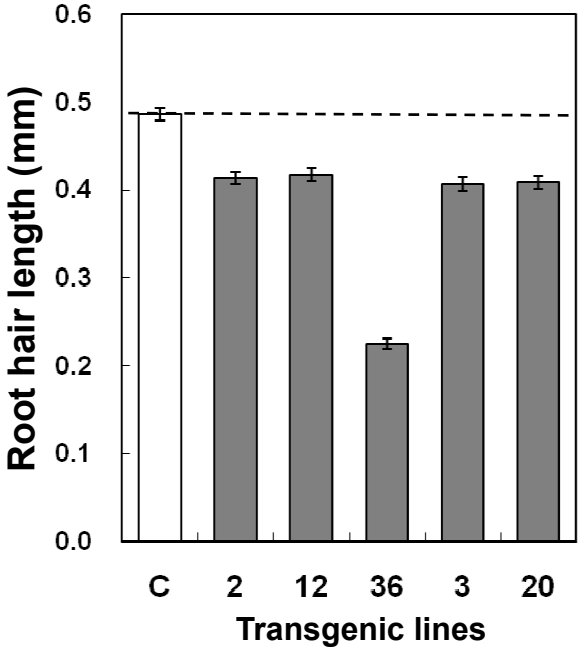
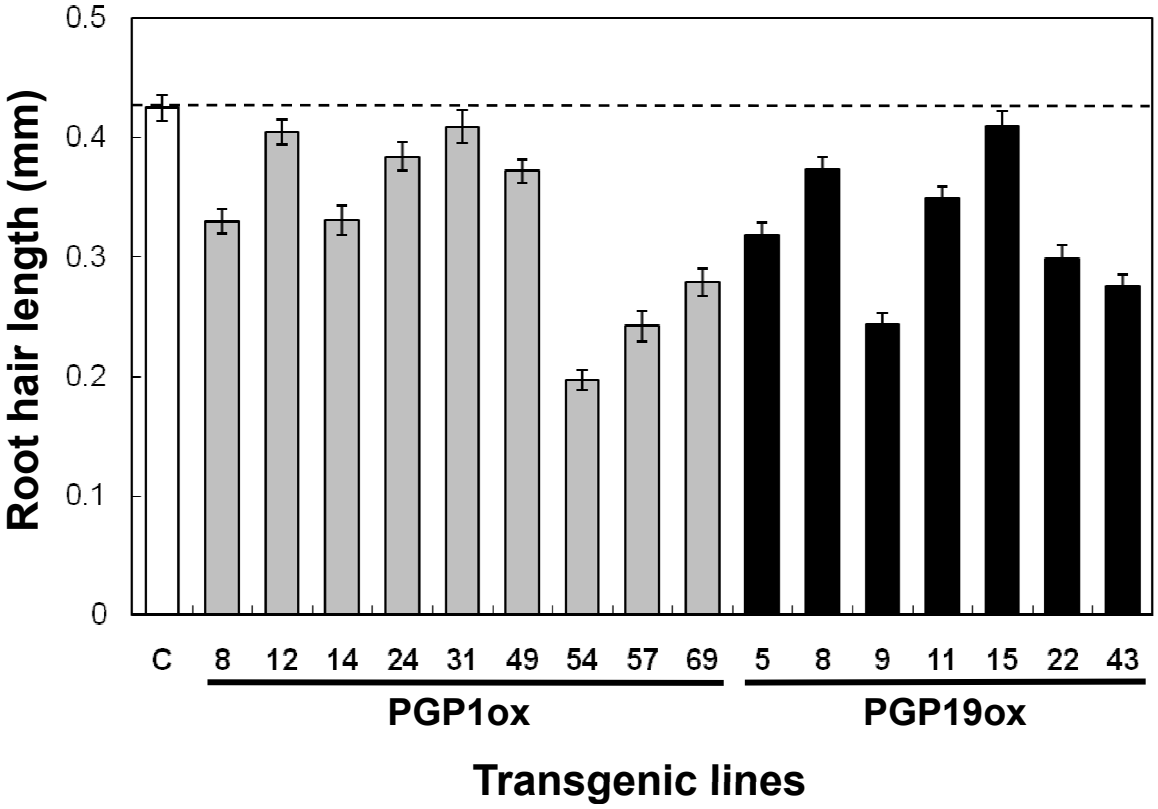


Supplemental Figure 1. Root Hair Length of P_{E7} *:PGP4-YFP* Lines.
(A) Independent P_{E7} *:PGP4-YFP* transformant lines were randomly selected, and root hair length was compared with that of the P_{E7}*:YFP* control line (C). The horizontal broken line indicates the control level. Bars are S.E. (N=169-180, average=178)
(B) The expression level of PGP4 is proportional to the reduction of root hair elongation in the transformants. The fluorescence from PGP4-YFP fusion protein was observed by excitation at 488 nm and emission at 543 nm which is shown as green here.

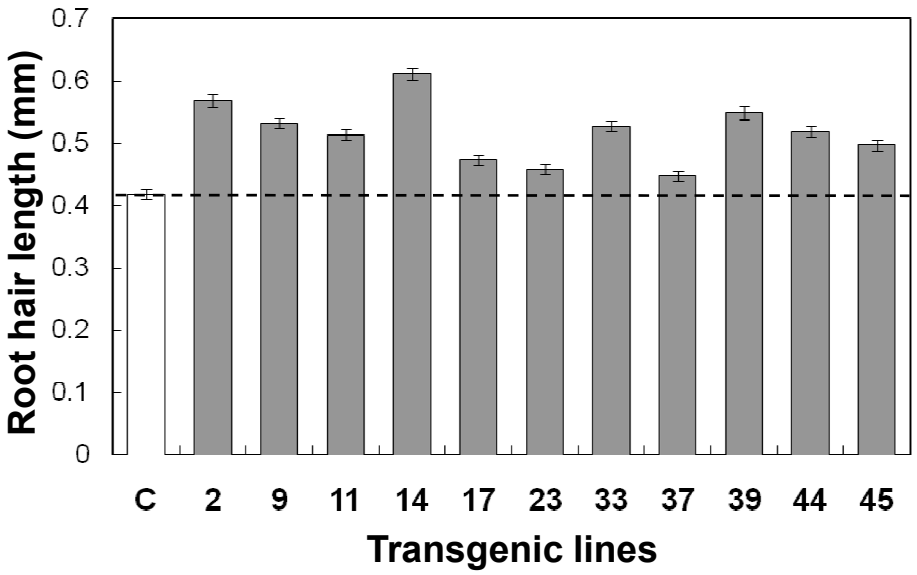


Supplemental Figure 2. Root Hair Length of *P_{35S}:PGP4-YFP* Lines.
Root hair length of five independent *P_{35S}:PGP4-YFP* transgenic lines was compared with that of the *P_{35S}:YFP* control line (C). The horizontal broken line indicates the control level. Bars are S.E. (N=342)

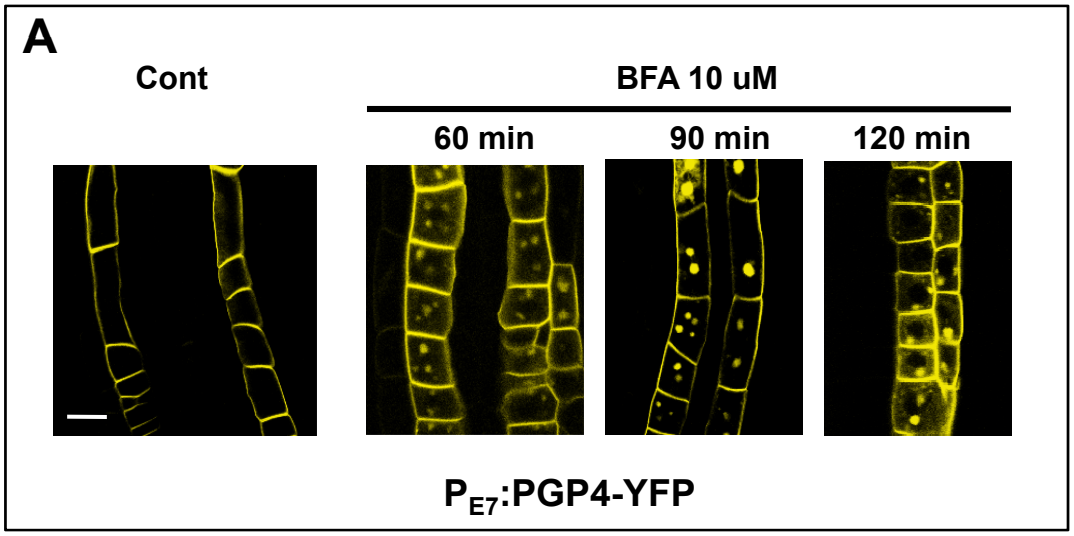


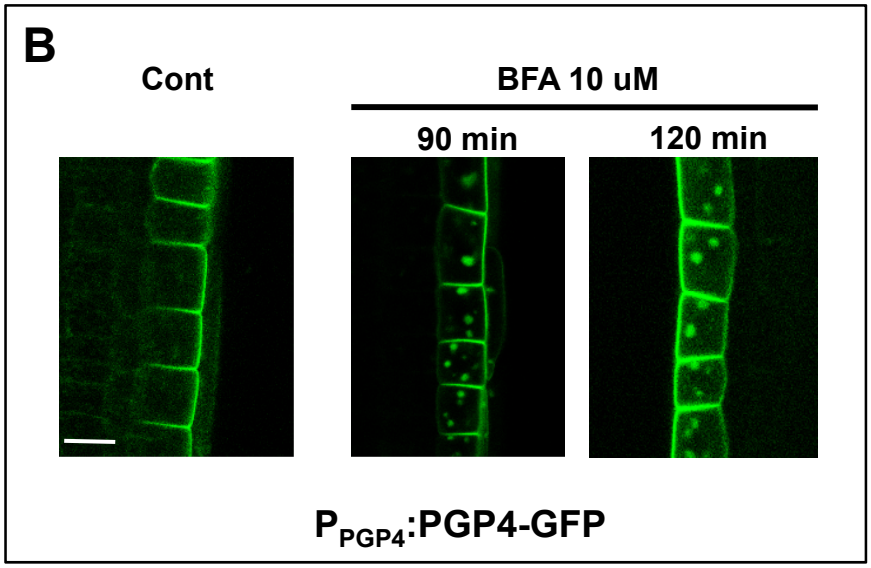
Supplemental Figure 3. Root Hair Length of P_{E7}*:PGP1-YFP* (PGP1ox) and P_{E7}*:PGP19-YFP* (PGP19ox) Lines.

Root hair length of independent transgenic lines was compared with that of the P_{E7}*:YFP* control line (C). The horizontal broken line indicates the control level. Bars are S.E. (N=117-180, average=170)

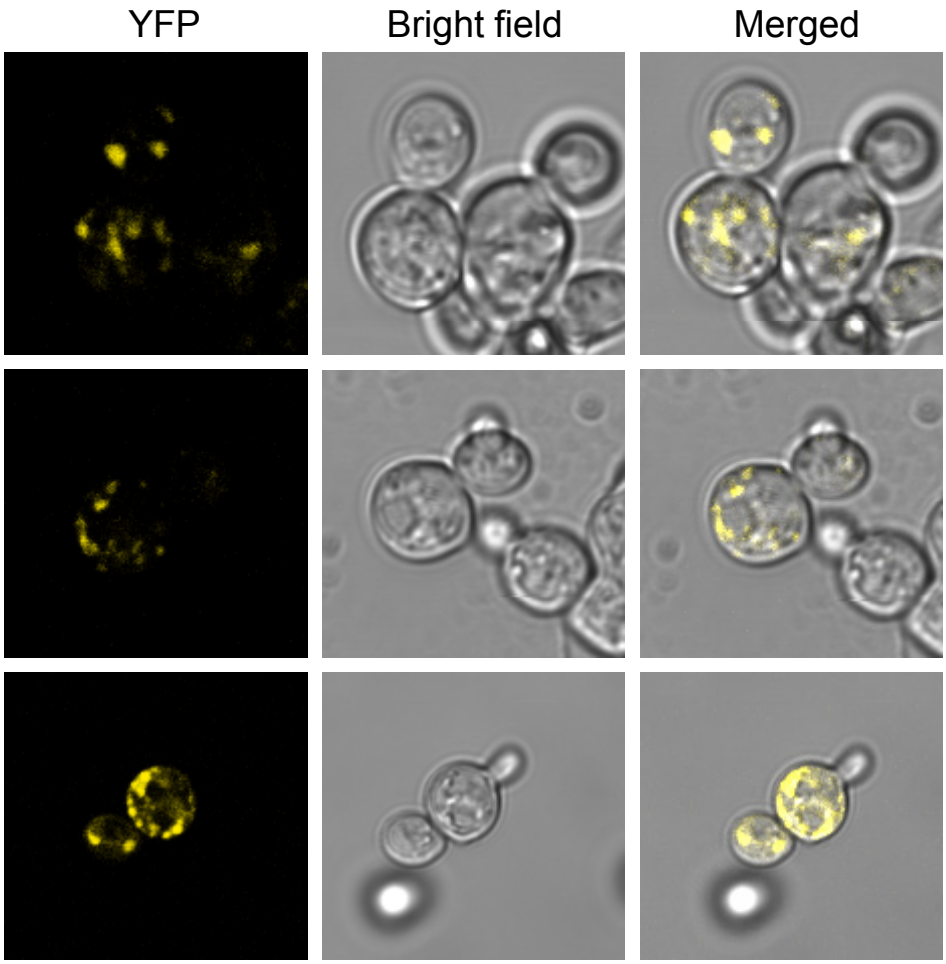


Supplemental Figure 4. Root Hair Length of P_{E7}:*AUX1-YFP* Lines.
Root hair length of independent P_{E7}:*AUX1-YFP* transgenic lines was compared with that of the P_{E7}:*YFP* control line (C). The horizontal broken line indicates the control level. Bars are S.E. (N=180-333, average=210)





Supplemental Figure 5. The BFA Effect on the Trafficking of PGP4.
(**A**) Confocal microscope images of P_{E7}*:PGP4-YFP* transformant roots. Bar=10 um for all.
(**B**) Confocal microscope images of P_{PGP4}*:PGP4-GFP* transformant roots. Bar=10 um for all.
The transformant seedlings were treated with BFA (10 uM) for the indicated time period. Although BFA induces internal accumulation of some PGP4 proteins, the trafficking of PGP4 to the plasma membrane still occurs.



Supplemental Figure 6. PGP4-YFP Localizes in the Internal Compartments in Yeast Cells.
Confocal microscopy images of yellow fluorescence (YFP) from PGP4-YFP, brightfield images of the same cells, and the merged images. The P_{GAL1}:*PGP4-YFP* construct was introduced into the aux in-sensitive *Saccharomyces cerevisiae* strain *Δyap1-1* (Prusty et al., 2004).